EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SCHEDULES OF PENSION INFORMATION FOR PARTICIPATING EMPLOYERS AND INDEPENDENT AUDITORS' REPORT YEAR ENDED SEPTEMBER 30, 2020

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Independent Auditors' Report

The Board of Trustees
Employees Retirement System of the City of St. Louis
St. Louis, Missouri

Report on the Schedules

We have audited the accompanying schedule of employer allocations for Employees Retirement System of the City of St. Louis (the "System") for the year ended September 30, 2020, and the related notes to the schedule. We have also audited the total for all entities of the columns titled proportionate share of net pension liability, total proportionate share of deferred outflows of resources, total proportionate share of deferred inflows of resources, and total employer pension expense ("specified column totals") included in the accompanying schedules of pension amounts by employer of the System as of and for the year ended September 30, 2020, and the related notes to the schedules.

Management's Responsibility for the Schedules

The System's management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the schedule of employer allocations and the specified column totals included in the schedules of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedules of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedules of pension amounts by employer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedules of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the schedule of employer allocations and specified column totals included in the schedules of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and specified column totals included in the schedules of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the accompanying schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense for the total of all participating entities of the System as of and for the year ended September 30, 2020, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended September 30, 2020, and our report thereon, dated February 22, 2021, expressed an unmodified opinion on those financial statements.

Restriction of Use

Our report is intended solely for the information and use of the System's management, the Board of Trustees, the System's employers, and their auditors and is not intended to be used by anyone other than these specified parties.

February 22, 2021

Anders Minkler Hecler & Helm LLP

Employees Retirement System of the City of St. Louis Schedule of Employer Allocations Year Ended September 30, 2020

Employer	Employer Name	<u></u>	contributions	Proportionate Share
1	City	\$	19,767,121	64.63689 %
2	Firemen's Retirement System		41,284	0.13500
3	Police Retirement System		54,588	0.17850
4	Parking Meters		546,054	1.78555
5	Airport		2,458,527	8.03918
6	Water		1,628,539	5.32519
7	Zoo		2,843,405	9.29770
8	Library		1,420,768	4.64580
9	Art Museum		1,511,061	4.94105
10	Mental Health Board		109,724	0.35879
11	Tower Grove Park		157,426	0.51477
12	Taxicab Commission		23,402	0.07652
13	Firefighters' Retirement Plan		19,896	0.06506
	•		30,581,795	100.00000 %
	Plus: Member Contributions *		151,774	
	Total Contributions in the Statement of Changes in Fiduciary Net Position (Base Plan)	\$	30,733,569	

^{*} Purchases of additional creditable service

Employees Retirement System of the City of St. Louis Schedule of Pension Amounts by Employer As of and for the Year Ended September 30, 2020

Proportionate Share of Net Pension Liability

Employer	Employer Name	Proportionate Share	6.25%	 7.25%		8.25%	T 	otal Covered Payroll	Share of Net Pension Liability at 7.25% as % of Payroll
1	City	64.63689 %	\$ 254,445,982	\$ 183,461,333	\$	123,057,910	\$	158,522,449	115.7 %
2	Firemen's Retirement System	0.13500	531,415	383,162		257,009		330,881	115.8
3	Police Retirement System	0.17850	702,667	506,639		339,831		437,921	115.7
4	Parking Meters	1.78555	7,028,907	5,068,001		3,399,396		4,380,873	115.7
5	Airport	8.03918	31,646,607	22,817,922		15,305,274		19,713,147	115.7
6	Water	5.32519	20,962,851	15,114,691		10,138,280		13,062,058	115.7
7	Zoo	9.29770	36,600,827	26,390,027		17,701,287		22,953,094	115.0
8	Library	4.64580	18,288,385	13,186,340		8,844,826		11,466,471	115.0
9	Art Museum	4.94105	19,450,652	14,024,362		9,406,934		12,194,135	115.0
10	Mental Health Board	0.35879	1,412,387	1,018,363		683,074		881,731	115.5
11	Tower Grove Park	0.51477	2,026,416	1,461,092		980,037		1,270,098	115.0
12	Taxicab Commission	0.07652	301,235	217,197		145,686		188,894	115.0
13	Firefighters' Retirement Plan	0.06506	256,105	 184,657	_	123,860	_	159,505	115.8
	Total	100.00000 %	\$ 393,654,436	\$ 283,833,786	\$	190,383,404	\$	245,561,257	115.6 %

Employees Retirement System of the City of St. Louis Schedule of Pension Amounts by Employer Total Deferred Outflows, Deferred Inflows, and Pension Expense As of and for the Year Ended September 30, 2020

			Proportionate Share of Deferred Outflows								
		Proportionate				Assumption		Investment	Changes in		
<u>Employer</u>	Employer Name	Share		Experience	_	Changes		Return	 Proportion		Total
	011	0.4.00000.04		0.070.040		10 = 11 000		00 000 740			10.000.054
1	City	64.63689 %	\$	2,879,910	\$	19,544,626	\$	26,603,718	\$ -	\$	49,028,254
2	Firemen's Retirement System	0.13500		6,015		40,819		55,562	3,928		106,324
3	Police Retirement System	0.17850		7,953		53,974		73,468	10,844		146,239
4	Parking Meters	1.78555		79,556		539,908		734,911	183,030		1,537,405
5	Airport	8.03918		358,187		2,430,854		3,308,826	-		6,097,867
6	Water	5.32519		237,265		1,610,209		2,191,781	9,935		4,049,190
7	Zoo	9.29770		414,261		2,811,400		3,826,817	1,202,349		8,254,827
8	Library	4.64580		206,994		1,404,776		1,912,151	218,623		3,742,544
9	Art Museum	4.94105		220,149		1,494,053		2,033,672	381,705		4,129,579
10	Mental Health Board	0.35879		15,986		108,489		147,673	57,184		329,332
11	Tower Grove Park	0.51477		22,936		155,654		211,873	25,464		415,927
12	Taxicab Commission	0.07652		3,409		23,139		31,496	31,080		89,124
13	Firefighters' Retirement Plan	0.06506	_	2,899		19,672		26,777	 13,055	_	62,403
	Total	100.00000 %	\$	4,455,520	\$	30,237,573	\$	41,158,725	\$ 2,137,197	\$	77,989,015

Employees Retirement System of the City of St. Louis Schedule of Pension Amounts by Employer Total Deferred Outflows, Deferred Inflows, and Pension Expense (Continued) As of and for the Year Ended September 30, 2020

	Proportionate Share of Deferred Inflows						Proportionate Share of Pension Expense			
<u>Employer</u>	Employer Name	Experience	<u>ce</u> _	Assumption Changes	Investment Return	Changes in Proportion	<u>Total</u>	Collective Pension Expense	Changes in Proportion	Total Employer Pension Expense
1	City	\$	_	\$ -	\$ -	\$ 1,190,058	\$ 1,190,058	\$ 32,284,307	\$(1,242,268)	\$ 31,042,039
2	Firemen's Retirement System		_	· -	· _	- , , , -	- , , , -	67,426	3,985	71,411
3	Police Retirement System		_	_	_	_	-	89,155	21,026	110,181
4	Parking Meters		-	-	-	-	-	891,833	165,405	1,057,238
5	Airport		-	-	-	692,610	692,610	4,015,346	(480,585)	3,534,761
6	Water		-	-	-	208,930	208,930	2,659,783	(307,155)	2,352,628
7	Zoo		-	-	-	-	-	4,643,942	943,229	5,587,171
8	Library		-	-	-	38,911	38,911	2,320,445	385,941	2,706,386
9	Art Museum		-	-	-	-	-	2,467,914	438,284	2,906,198
10	Mental Health Board		-	-	-	-	-	179,205	41,619	220,824
11	Tower Grove Park		-	-	-	6,688	6,688	257,113	33,307	290,420
12	Taxicab Commission		-	-	-	-	-	38,221	(13,315)	24,906
13	Firefighters' Retirement Plan					<u> </u>		32,495	10,527	43,022
	Total	\$	_	<u>\$</u>	<u>\$</u> -	<u>\$ 2,137,197</u>	<u>\$ 2,137,197</u>	\$49,947,185	\$ -	<u>\$49,947,185</u>

1. Description of System

General

The Employees Retirement System of the City of St. Louis (the "System") is a cost-sharing, multiple-employer, defined benefit public employees's retirement system for all non-uniformed employees of the City of St. Louis and certain other public entities funded by or providing services to residents of the City of St. Louis. These additional employee groups covered by the System are the employees of the St. Louis Public Library, the Art Museum of St. Louis, the St. Louis Zoological Park, the City of St. Louis Water Division, the Airport Authority, the City Mental Health Board, the Metropolitan Taxicab Commission, Tower Grove Park, the System, and civilian employees of the police department and police and firemen's retirement systems, and firefighters' retirement plan.

Membership and Eligibility

Membership is immediate for all persons employed on a full-time basis.

Benefits

The System provides for defined benefit payments for retirement, death, or disability to eligible employees or their beneficiaries based upon creditable service, final average compensation, and a benefit compensation base. Benefits vest to employees covered by the System after the employee has attained five years creditable service.

Employees retire with full retirement benefits after the age of 65 or if an employee's age and creditable service combined equal or exceed 85 years. Employees may retire and receive a reduced benefit after age 60 with five years of creditable service, age 55 with at least 20 years of creditable service, or any age with 30 years of creditable service.

The monthly pension benefits of all retirees or their beneficiaries are adjusted according to the changes in the Consumer Price Index of the U.S. Department of Labor. Increases are limited each year, with total increases to retirees or their beneficiaries limited to 25%.

Contributions

Employer contributions to the System are calculated on creditable compensation for active members reported by employers. Employers are statutorily required to pay a fixed percentage of the compensation.

The Schedule of Employer Allocations (the "Schedule") reflects current year employer contributions. Contributions and adjustments to contributions reported in the current fiscal year for service performed in the prior year are recognized as contributions in the current year and included in the Schedule. The Schedule includes the following for each individual employer:

- Employer name
- The amount of the employer contributing entity's contributions for the period October 1, 2019 to September 30, 2020 (the fiscal year), offset by the prior year accrual for the same employer.
- The employer contributing entity's contributions as a percentage of total employer contributions.

The Schedule has been rounded and percentages are to the first five decimal places.

2. Summary of Significant Accounting Policies

Basis of Accounting

Contributions for employers and the net position liability are recognized on an accrual basis of accounting.

Use of Estimates

The preparation of the Schedule and the Schedules of Pension Amounts by Employer in conformity with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

Fair Value Measurements

The System follows guidance issued by the GASB on fair value measurements, which establishes a framework for measuring fair value, clarifies the definition of fair value within that framework, and expands disclosures about the use of fair value measurements. This guidance applies whenever fair value is the applicable measurement. The three general valuation techniques used to measure fair value are the market approach, cost approach, and income approach.

Relationship to the System's Basic Financial Statements

The Schedule also includes a reconciliation from total employer contributions included in the Schedule to total contributions shown in the System's Statement of Changes in Fiduciary Net Position.

Subsequent Events

The System has evaluated subsequent events through February 22, 2021, the date the schedules of pension information for participating employers were available to be issued.

3. Components of Net Pension Liability

The components of net pension liability of the System, for participating employers, as of September 30, 2020, are as follows:

Total pension liability \$1,084,125,462 System fiduciary net position \$00,291,677

Employers' net pension liability \$ 283,833,785

System fiduciary net position as a percentage of total pension liability

73.8 %

The net pension liability is calculated using a discount rate of 7.25% which is the long-term expected rate of return on investments reduced by investment expense. The net pension liability was determined by an actuarial valuation as of September 30, 2020. The fiduciary net position is projected to be sufficient to make all projected benefit payments for the current members when due. Therefore, the long-term expected rate of return on the System's investments (7.25%) was applied to all prior periods of the projected benefit payments to determine the total pension liability. The actuarial valuation involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. An experience study was performed in 2020 which reviewed all economic and demographic assumptions.

4. Sensitivity of Net Pension Eligibility to Changes in the Discount Rate

Discount Rate

The discount rate used to measure the total pension liability was 7.25% as of September 30, 2020. The projection of cash flows used to determine the discount rate assumed that contributions from System members will be made at the current contribution rate. Based on these assumptions, the System's net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term expected rate of return was determined net of investment expenses but without reduction from administrative expense.

Sensitivity

GASB Statement No. 67 requires the disclosure of the sensitivity of the net pension liability to changes in the discount rate. For calculations of total pension liability the actuary has used an assumed long-term expected rate of return of 7.25%. The table below presents the net pension liability if the discount rate were one-percentage-point lower or one-percentage-point higher than the current rate.

	1% Decrease 6.25%	Discount Rate 7.25%	1% Increase 8.25%
Total pension liability	\$1,193,946,112	\$1,084,125,462	\$ 990,675,080
Plan fiduciary net pension	800,291,677	800,291,677	800,291,677
Net pension liability	\$ 393,654,435	\$ 283,833,785	\$ 190,383,403
System fiduciary net position as a			
percentage of total pension liability	67.0 %	73.8 %	80.8 %

5. Actuarial Methods and Assumptions

The following are the actuarial assumptions used to determine contributions rates applied to all periods in the measurements:

Valuation date	October 1, 2019
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the plan year.
Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Fixed 20 year period as of October 1, 2015 as a level percentage of payroll. Future gains and losses and changes in actuarial assumptions will be amortized in layers over separate 20 year periods.
Discount rate	7.50%
Amortization growth rate	3.00%
Inflation rate	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	RP-2000 Healthy Mortality with 3 year set-forward with generational projections using Scale AA

The long-term expected rate of return on pension plan investments was determined using the building block approach and forward-looking model in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These rates are combined to produce the long-term expected rate of return by weighing the expected future real rate of return by the target asset allocation percentage and by adding expected inflation.

Even though history provides a valuable perspective for setting the investment return assumption, the System relies primarily on an approach which builds upon the last capital market assumption. Specifically, the System uses Marquette Associates, Inc. capital market assumptions in analyzing the System's asset allocation. The assumptions and the System's formal policy for asset allocation are shown below.

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to the expected long-term real return and reflecting expected volatility and correlation.

Asset class	Target Allocation	Long-Term* Expected Real Rate of Return
Large cap	25.00 %	7.27 %
Mid cap	7.50	7.60
Small cap	7.50	7.90
International large cap	12.00	7.47
Emerging markets	3.00	8.10
Bank loans	5.00	6.10
Fixed income	10.00	3.30
International fixed income	5.00	5.80
Core real estate	10.00	6.60
Infrastructure	5.00	7.50
Private equity	5.00	10.80
Hedge funds	5.00	6.70
	<u>100.00 %</u>	7.68 %

*Geometric return

The following are the key actuarial assumption and methods used to calculate the total pension liability as of September 30, 2020:

Inflation assumption	2.50%
Administrative expenses	0.40% of payroll
Municipal bond yield	2.21% as of September 30, 2020 Bond Buyer 20-Bond GO Index, September 24, 2020
Long-term expected rate of return	7.25% net of investment expenses as of September 30, 2020
Discount rate	7.25% as of September 30, 2020

6. Deferred Outflows of Resources and Deferred Inflows of Resources

Each employer will need to calculate two additional types of deferred outflows of resources and deferred inflows of resources which are employer specific amounts. These amounts relate the (1) net impact from changes in proportion allocation percentage between the periods; and (2) contributions made to the System subsequent to the measurement date and before the end of employer's reporting period.

The employer is solely responsible for its financial statements and, therefore, is responsible for evaluating the information used to recognize and disclose pension amounts in its financial statements.

The Schedules of Pension Amounts by Employer calculated each employer's allocation percentage to the collective amounts provided. Similarly, the employer's auditor is solely responsible for the audit of the employer's financial statements, and therefore, is responsible for determining the sufficiency of the audit evidence necessary to reduce audit risk to the appropriate level. Nevertheless, the employer and their auditor may use the System's report to provide evidence that the pension amounts allocated to the employer are not materially misstated.

The impact of experience gains or losses and assumption changes on the total pension liability are recognized in the collective pension expense over the average expected remaining service life of all active and inactive members of the System. As of the measurement date, this recognition period was three years. The amortization of the net difference between projected and actual investment earnings on System investment is amortized over a closed 5 year period (inclusive of 2020). The table below summarizes the current balance of collective deferred outflows and deferred inflows of resources along with the net recognition over the next five years:

		Deferred Inflows of Resources
Differences between expected and actual		
experience	\$ 4,455,520	\$ -
Change in assumptions	30,237,573	-
Net difference between projected and		
actual earnings on System investments	41,158,725	-
Total	\$ 75,851,818	\$ -

Amounts reported as deferred outflows and inflows of resources will be recognized in pension expense as follows:

Amount		
\$	26,880,107	
	32,700,772	
	13,255,906	
	3,015,033	
\$	75,851,818	
	\$	

The table below shows the employer's proportionate share of recognition in future years:

		Proportionate Share of Recognition for FYE						
Employer	Employer Name	2021	2022	2023	2024			
	. ,							
1	City	\$16,501,120	\$20,820,049	\$ 8,568,205	\$ 1,948,824			
2	Firemen's Retirement System	39,375	44,985	17,895	4,070			
3	Police Retirement System	57,582	59,612	23,662	5,382			
4	Parking Meters	607,761	639,116	236,691	53,835			
5	Airport	1,752,590	2,344,617	1,065,667	242,384			
6	Water	1,227,455	1,746,346	705,902	160,556			
7	Zoo	3,286,077	3,455,926	1,232,495	280,329			
8	Library	1,447,963	1,499,755	615,842	140,072			
9	Art Museum	1,593,864	1,731,761	654,981	148,974			
10	Mental Health Board	139,095	131,859	47,561	10,818			
11	Tower Grove Park	160,491	164,990	68,237	15,520			
12	Taxicab Commission	39,719	36,953	10,144	2,307			
13	Firefighters' Retirement Plan	27,015	24,803	8,624	1,962			
	Total	\$26,880,107	\$32,700,772	\$13,255,906	\$ 3,015,033			

7. Changes in Net Pension Liability

The following table represents the changes in total pension liability and fiduciary net position for the years ended September 30,:

		2020		2019		2018		2017		2016		2015		2014
Total Pension Liability														
Service cost	\$	13,008,418	\$	12,881,819	\$	13,342,936	\$	13,185,412	\$	13,703,072	\$	13,067,553	\$	10,591,910
Interest		74,536,674		73,206,999		72,329,296		71,206,835		69,893,488		73,825,307		72,012,146
Difference between expected and actual		0.000.400		740 500		(40.070.074)		(4.070.407)		(0.004.570)		(0.704.400)		(0.004.705)
experience		6,326,499		713,562		(12,970,671)		(4,372,137)		(3,601,576)		(2,701,109)		(3,664,735)
Change of assumption		45,356,360		- (67 000 010)		- (66 700 624)		(62 E22 024)		(60 070 E46)		(5,107,330)		- (EC 217 072)
Benefit payments Net change in total pension liability	_	(70,557,233) 68,670,718	_	(67,890,918) 18,911,462	_	(66,788,634) 5,912,927	_	(63,532,834) 16,487,276	_	(60,972,546) 19,022,438	_	(59,065,812) 20,018,609	_	(56,317,073) 22,622,248
Total pension liability, beginning	1	,015,454,744		996.543.282		990.630.355		974.143.079		955.120.641		935,102,032		912,479,784
rotal perision liability, beginning		,015,454,744	_	990,043,262	_	990,030,333	_	914,143,019	_	955,120,041	_	933,102,032	_	912,479,704
Total pension liability, ending	\$1	,084,125,462	\$1	<u>,015,454,744</u>	\$	996,543,282	\$	990,630,355	\$	974,143,079	\$	955,120,641	\$	935,102,032
Plan Fiduciary Net Position														
Employer contributions	\$	30,581,795	\$	29,629,568	\$	29,361,102	\$	29,782,200	\$	32,127,591	\$	35,436,141	\$	36,788,260
Member contributions		151,774		147,584		58,201		134,248		10,093		289,810		129,164
Net investment income (loss)		43,257,887		9,411,622		48,770,991		86,394,236		66,460,934		(28,435,882)		70,076,027
Benefit payments		(70,557,232)		(67,890,918)		(66,788,634)		(63,532,834)		(60,972,546)		(59,065,812)		(56,317,073)
Administrative expenses		(920,268)	_	(875,268)	_	(962,177)	_	(763,273)	_	(722,132)	_	(722,758)		(670,957)
Net change in plan fiduciary net		0.540.050		(00 577 440)		40 400 400		50 044 577		00 000 040		(50, 400, 504)		50 005 404
position		2,513,956		(29,577,412)		10,439,483		52,014,577		36,903,940		(52,498,501)		50,005,421
Plan fiduciary net position, beginning	Φ.	797,777,721	φ.	827,355,133	φ.	816,915,650	φ.	764,901,073	Φ.	727,997,133	Φ.	780,495,634		730,490,213
Plan fiduciary net position, ending	\$	800,291,677	<u>\$</u>	797,777,721	<u>\$</u>	827,355,133	<u>\$</u>	816,915,650	\$	764,901,073	\$	727,997,133	\$	780,495,634
Net pension liability, ending	\$	283,833,785	\$	217,677,023	\$	169,188,149	\$	173,714,705	\$	209,242,006	\$	227,123,508	\$	154,606,398
rect portolor hability, origing			=		=		=							
Plan fiduciary net position as a														
percentage of total pension liability		73.82 %		78.56 %		83.02 %		82.46 %		78.52 %		76.22 %		83.47 %
Covered employee payroll	\$	245,561,257	\$	240,731,698	\$	239,956,558	\$	239,583,848	\$	237,354,364	\$	238,385,100	\$	237,794,875
Net pension liability as a percentage of				•		•		•				•		•
covered employee payroll		115.59 %		90.42 %		70.51 %		72.51 %		88.16 %		95.28 %		65.02 %

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.